

### **REMARKS**

This Amendment is responsive to the Office Action of 8/22/2007. Reconsideration and allowance of claims 2, 4-7, 9, 11-13, and 15-21 are requested.

### **The Office Action**

As stated in the Office Action, claims 1-20 stand rejected under 35 U.S.C §103(a) as being unpatentable over Sabol, et al. (U.S. Patent Application No. 2004/0122702) in view of Brackett, et al. (U.S. Patent Application No. 2003/0206646). This is the only art rejection made by the Examiner.

In the detailed action from the Examiner, however, only Sabol is used to reject the majority of the claims. In paragraph 13 of the detailed action, Brackett is cited as teaching a cinè sequence generating means, without referencing a claim. Since claim 7 is the only claim that specifically claims a cinè image sequence generating means, paragraphs 12 and 13 of the Examiner's detailed action are taken as only addressing claim 7.

Further, only Sabol was cited against the remainder of the claims, and no reasons were given by the Examiner that certain specific claimed elements that are not shown by Sabol would have been obvious to one skilled in the art.

Claims 5-7 stand rejected under 35 U.S.C. §112, second paragraph.

### **Amendments to the Drawings**

Amendments to the drawings are reflected in a replacement sheet, included herewith. The descriptions of items 78, 80, and 82 have been amended. An indication of acceptability of all the drawings is earnestly solicited, as one was not provided with the latest Office Action.

### **The Present Application**

The present application is directed to following the progress of a patient's treatment over time using diagnostic imaging. A baseline scan of the patient is taken that contains a region of interest. The user identifies the region of interest in the image. Parameters are then extracted from the image data to aid in identifying the same region in subsequent images, or in already existing images. Once the region of interest has been identified in the baseline and stored images, information is compiled

about the images for the user to use. For instance, a region of interest that includes a tumor could be identified in a baseline image. The system could then take that image, extract parameters from it, and look for those parameters in prior existing images of the patient, or subsequent images that also contained the region. Reports are formatted for the user to aid in visualization of the region and/or diagnosis and treatment.

### **The References of Record**

**Sabol** discloses a system that has access to several different sources of information about a patient. These sources include lab tests, physical exams, family histories, demographic data, imaging scans, patient questionnaires, and many others. Sabol operates under the assumption that all of these sources are useful, and can be used to help make and augment patient diagnoses. In addition to being useful in and of themselves, Sabol finds the sources have added value when combined with other information, so that the combined sources are worth more than the sum of the individual sources. For instance, by itself, a CT scan is useful in diagnosing many ailments, but when taken in conjunction with a genetic background workup of the subject, the CT scan can reveal additional information that would not have been recognizable without the genetic background of the subject. Sabol aims to cull all available sources of information about a patient and make them available to medical professionals to aid them in making diagnoses or planning treatments. While Sabol does access diagnostic images, the images are just one of many mined pieces of information about the subject. Sabol does not discuss generating from retrieved images reports that show the development over time of a size of a tumor or other parameter value.

### **The Claims Distinguish Patentably Over the References of Record**

**Claim 2** now calls for a user interface with which a user selects a region of interest of at least a baseline diagnostic image from which parameter values are to be extracted. Sabol fails to disclose a user interface at which a user selects a region of interest from a baseline image. The Examiner cites paragraph [0251] of Sabol as showing the user interface limitation. Paragraph [0251] of Sabol discloses performing

a physical examination of the patient to obtain baseline information, not selecting an area in a baseline image, let alone a user interface for selecting an area in a baseline image. Neither in paragraph [0251] nor in the remainder of the document does Sabol disclose selecting a region of interest, or a user interface therefor. It is therefore respectfully submitted that **claim 2** and **claims 4-7** dependent therefrom now distinguish patentably and unobviously over the references of record.

**Claim 5** now calls for a database searching means for searching the subject database for additional diagnostic images of the selected region of interest of the subject. Sabol does not disclose, nor does it reasonably suggest such a means. Sabol can mine a database and retrieve images that are associated with a subject, but Sabol does not go as far as to analyze the images to determine whether or not they contain a pre-defined region of interest. Though patentable by virtue of its dependency on claim 2, **claim 5** further defines patentably and unobviously over the references of record. It is also respectfully submitted that the amendments to claim 5 obviate the §112, second paragraph rejection.

**Claim 9** calls for selecting a region of interest on the display. Sabol neither discloses nor reasonably suggests selecting a region of interest on a display. The Examiner does not expressly address this limitation in the Office Action at paragraph 5, where present claim 8 is addressed. The idea of selecting a region of interest is addressed in paragraph 6 of the Office Action. As with claim 2, however, paragraph [0251] of Sabol does not disclose selecting a region of interest in the baseline image.

Claim 9 further calls for searching the subject database for additional diagnostic images of the selected region of interest. Sabol does not disclose searching the images in the database for the specified region of interest. It is therefore respectfully submitted that **claim 9** and **claims 11-13** and **15-17** dependent therefrom distinguish patentably and unobviously over the references of record.

**Claim 17** calls for the parameter values to include at least one of several things. The Examiner has stated, without citing any specific section of Sabol, that Sabol discloses the claimed limitation (paragraph 10). The Applicant respectfully disagrees; Sabol fails to disclose the claimed limitation. As argued previously, Sabol does not disclose selecting a region of interest of the image, so therefore, Sabol cannot

extract parameter values of that region. Though patentable by virtue of its dependency on claim 9, **claim 17** further defines patentably and unobviously over the references of record.

**Claim 18** calls for selecting a region of an image representation for further study. As with claims 2 and 9, Sabol fails to teach selecting a region of the image representation. It is therefore respectfully submitted that **claim 18** and **claims 19-21** dependent therefrom distinguish patentably and unobviously over the references of record.

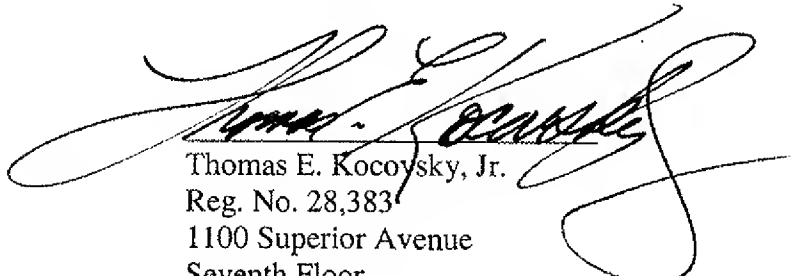
### CONCLUSION

For the reasons set forth above, it is submitted that claims 2, 4-7, 9, 11-13, and 15-21 distinguish patentably over the references of record and meet all statutory requirements. An early allowance of all claims is requested.

In the event the Examiner considers personal contact advantageous to the disposition of this case, he is requested to telephone Tom Kocovsky at (216) 861-5582.

Respectfully submitted,

Fay Sharpe LLP



Thomas E. Kocovsky, Jr.  
Reg. No. 28,383  
1100 Superior Avenue  
Seventh Floor  
Cleveland, OH 44114-2579  
(216) 861-5582